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UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/842,561	04/25/2001	Yann Cheri	35451/127 (3626.Palm)	7494

			EXAMINER
26371	7590	05/17/2005	CASCHERA, ANTONIO A

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2676	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>03 January 2005</u>.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-11 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ottenstein (U.S. Patent 5,270,818) in view of Helms (U.S. Patent 5,952,992).

In reference to claims 1 and 8, Ottenstein discloses a system and method for

automatically adjusting the brightness of cockpit displays (see column 1, lines 9-11). Ottenstein

discloses the invention to also apply to other types of displays including CRT and MFD (multi-

function display) (see columns 1, lines 32-36 & 45-50). Ottenstein discloses the display to

comprise of a bezel, surrounding the display and therefore supporting the display (see column 1,

lines 59-60). Ottenstein also discloses "computing electronics" in the form of a microprocessor,

which is "embedded" in the display (see column 1, lines 61-64). Ottenstein also discloses the

bezel of the display comprising two ambient light sensors, positioned around the face of the

display (see column 1, lines 59-60). Ottenstein further discloses the ambient light sensors used

in providing input to the microprocessor regarding ambient light conditions at the face of the

display (see column 4, lines 65-66 and #12 and 13 of Figure 1, light represented by arrows points

towards the sensors & face of the display). Ottenstein also discloses the microprocessor to adjust

the brightness factor of the display based upon measurements performed by the sensors (see

column 2, lines 20-53). Ottenstein however, does not explicitly disclose the intended use of the invention for handheld computers however Helms does. Helms discloses the use of two photodetectors to detect ambient light directed toward a display (see column 4, lines 41-51 and #14', 410 of Figure 4), the display comprised within a laptop computer or a handheld device (see Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the automatic display brightness adjustment techniques of Ottenstein with the handheld computer display of Helms in order to extend the application of Ottenstein's invention to a mobile computing device, making the invention more portable and user friendly (see columns 1-2, lines 56-2 of Helms and also see *In re Lindberg,* 93 USPQ 23 (CCPA 1952)). Further, since Helms already discloses the "essence" of the invention as recited in the claims except for details regarding ambient light sensor configurations, which are fully disclosed by Ottenstein, the Office believes that the techniques of Ottenstein's invention would be directly applicable within the computing environment of Helm's and could be easily combined as Ottenstein utilizes hardware that is directly applicable to mobile or handheld computing devices such as a microprocessor and various switches. In reference to claim 8, Ottenstein further discloses computing an autogain signal from measured light sensor signals (see Figure 1), which the Office interprets functionally equivalent to the control signal of Applicant's claim.

In reference to claim 2, Ottenstein and Helms disclose all of the claim limitations as applied to claim 1 above in addition, Helms discloses the use of two photodetectors to detect ambient light directed toward a display (see column 4, lines 41-51 and #14', 410 of Figure 4). Helms also discloses the two photodetectors on opposite sides of an LCD display (see #14' and 410 of Figure 4).

In reference to claim 3, Ottenstein and Helms disclose all of the claim limitations as applied to claim 1 above in addition, Ottenstein discloses the two light sensors to further comprise of a plurality of light sensors (see column 4, lines 60-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrange the plurality of light sensors, which are embedded in a bezel, around the face of the display (see column 1, lines 59-60) at each corner of the display in order to obtain measurements of ambient light on the face of the display uniformly therefore providing the most accurate representation of ambient light as seen by the display.

In reference to claim 4, Ottenstein and Helms disclose all of the claim limitations as applied to claim 3 above in addition, since the light sensors of Ottenstein are interfaced to a microprocessor (see #12 and 13 connected to #10 Figure 1), the Office interprets the light sensors equivalent to photoelectric sensors.

In reference to claim 5, Ottenstein and Helms disclose all of the claim limitations as applied to claim 4 above in addition, Helms discloses computing a weighted average of measured signals obtained by photodetectors and using the computed average to index a lookup table (see columns 4-5, lines 66-2).

In reference to claim 6, Ottenstein and Helms disclose all of the claim limitations as applied to claim 5 above in addition, Helms discloses computing a weighted average of measured signals obtained by photodetectors and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Office interprets the index value functionally equivalent to the control signal of Applicant's claims as the index value "controls" the looking into of a table of values.

In reference to claim 7, Ottenstein and Helms disclose all of the claim limitations as applied to claim 1 above in addition, Helms discloses the laptop or handheld device comprising an LCD type display (see column 3, lines 9-24 and #12 of Figure 1).

In reference to claims 9 and 14, Ottenstein and Helms disclose all of the claim limitations as applied to claims 8 and 13 respectively in addition, Helms discloses computing a weighted average of measured signals obtained by photodetectors and using the computed average to index a lookup table (see columns 4-5, lines 66-2).

In reference to claims 10 and 15, Ottenstein and Helms disclose all of the claim limitations as applied to claims 8 and 13 respectively in addition, Helms discloses computing a weighted average of measured signals obtained by photodetectors and using the computed average to index a lookup table (see columns 4-5, lines 66-2).

In reference to claims 11 and 16, Ottenstein and Helms disclose all of the claim limitations as applied to claims 8 and 13 respectively in addition, Helms discloses computing a weighted average of measured signals obtained by photodetectors and using the computed average to index a lookup table (see columns 4-5, lines 66-2). Note, the Office interprets the process of computing a weighted average of the photodetector signals in Helms, functionally equivalent to the algorithm of Applicant's claim.

In reference to claim 13, Ottenstein discloses a system and method for automatically adjusting the brightness of cockpit displays (see column 1, lines 9-11). Ottenstein discloses the invention to also apply to other types of displays including CRT and MFD (multi-function display) (see columns 1, lines 32-36 & 45-50). Ottenstein discloses the display to comprise of a bezel, surrounding the display and therefore supporting the display (see column 1, lines 59-60).

Ottenstein also discloses "computing electronics" in the form of a microprocessor, which is

"embedded" in the display (see column 1, lines 61-64). Ottenstein also discloses the bezel of the

display comprising two ambient light sensors, positioned around the face of the display (see

column 1, lines 59-60). Ottenstein further discloses the ambient light sensors used in providing

input to the microprocessor regarding ambient light conditions at the face of the display (see

column 4, lines 65-66 and #12 and 13 of Figure 1, light represented by arrows points towards the

sensors & face of the display). Ottenstein also discloses the microprocessor to adjust the

brightness factor of the display based upon measurements performed by the sensors (see column

2, lines 20-53). Ottenstein further discloses computing an autogain signal from measured light

sensor signals (see Figure 1), which the Office interprets functionally equivalent to the control

signal of Applicant's claim. Ottenstein however, does not explicitly disclose the intended use of

the invention for handheld computers however Helms does. Helms discloses the use of two

photodetectors to detect ambient light directed toward a display (see column 4, lines 41-51 and

#14', 410 of Figure 4), the display comprised within a laptop computer or a handheld device (see

Figure 1). It would have been obvious to one of ordinary skill in the art at the time the invention

was made to implement the automatic display brightness adjustment techniques of Ottenstein

with the handheld computer display of Helms in order to extend the application of Ottenstein's

invention to a mobile computing device, making the invention more portable and user friendly

(see columns 1-2, lines 56-2 of Helms and also see *In re Lindberg,* 93 USPQ 23 (CCPA 1952)).

Further, since Helms already discloses the "essence" of the invention as recited in the claims

except for details regarding ambient light sensor configurations, which are fully disclosed by

Ottenstein, the Office believes that the techniques of Ottenstein's invention would be directly

applicable within the computing environment of Helm's and could be easily combined as

Ottenstein utilizes hardware that is directly applicable to mobile or handheld computing devices

such as a microprocessor and various switches. Even further, Ottenstein discloses the two light

sensors to further comprise of a plurality of light sensors (see column 4, lines 60-62). It would

have been obvious to one of ordinary skill in the art at the time the invention was made to

arrange the plurality of light sensors, which are embedded in a bezel, around the face of the

display (see column 1, lines 59-60) in different positions in order to obtain measurements of

ambient light on the face of the display uniformly therefore providing the most accurate

representation of ambient light as seen by the display.

2.   Claims 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Ottenstein (U.S. Patent 5,270,818), Helms (U.S. Patent 5,952,992) and further in view of Katada

(U.S. Patent 5,933,089).

        In reference to claims 12 and 17, Ottenstein and Helms disclose all of the claim

limitations as applied to claims 8 and 13 respectively above. Although both Ottenstein and

Helms disclose generating a brightness control signal, neither explicitly disclose generating a

contrast control signal along with the brightness control signal however Katada does. Katada

discloses a pager that detects light quantity received at an LCD and adjusts light intensity of the

LCD according to the detected light by setting the contrast of the display (see column 3, lines 8-

13). Katada discloses the contrast being adjusted by setting a contrast adjustment signal

corresponding to light detected by light sensors (see column 7, lines 8-20). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to implement the

automatic display brightness adjustment techniques of Ottenstein and handheld computer display

of Helms with the contrast control signal generation techniques of Katada in order to improve the

display of text onto displays operating in environments of varying lighting conditions (see

columns 2-3, lines 66-5 of Katada), such as in mobile computing applications.

Response to Arguments

3.   Applicant's arguments, see pages 5-8 of Applicant's Remarks, filed 01/03/05, with

respect to the rejection(s)of claim(s) 1-17 under 35 U.S.C. 102(e) & 103(a) have been fully

considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon

further consideration, a new ground(s) of rejection is made in view of Ottenstein (U.S. Patent

5,270,818).

Conclusion

        Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Antonio Caschera whose telephone number is (571) 272-7781.

The examiner can normally be reached Monday-Thursday and alternate Fridays between 7:30

AM and 5:00 PM.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Matthew Bella, can be reached at (571) 272-7778.

        Any response to this action should be mailed to:

                Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the Technology Center 2600 Customer Service Office whose telephone

number is (703) 306-0377.

aac

5/11/05

MATTHEW C. BELLA
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